

IN THE CLAIMS:

Please cancel Claims 1-20 as set forth below.

Claims 1-20 (Canceled)

21. (Original) A method of operating a reactor, the method comprising:

activating a charge disposed within the reactor to open a container disposed within the reactor that contains a chemical or biological material to release the chemical or biological material into a reaction chamber of the reactor; and heating the chemical or biological material with water and an oxidant contained within the chamber to a temperature and pressure that exceeds the critical temperature and critical pressure of the water to initiate a supercritical oxidation process.

22. (Original) The method of claim 21, wherein activating the charge produces a metal jet that cuts through the container.

23. (Original) The method of claim 21, wherein activating the charge detonates or deflagrates a burster of the container.

24. (Original) The method of claim 21, further comprising containing exploding fragments of the container within a fragment-suppression system of the reactor after opening the container.

25. (Original) The method of claim 21, wherein activating the charge is in response to receiving electrical power at the charge.

26. (Original) A method for oxidizing a chemical or biological material, the method comprising:

disposing a container containing the chemical or biological material within a tube of a fragment-suppression system located within a chamber of a reactor;
adding a water-oxidant mixture to the chamber;
activating a charge disposed within the fragment-suppression system to open the container to release the chemical or biological material into the chamber; and
heating the chemical or biological material with the water-oxidant mixture to a temperature and pressure that exceeds the critical temperature and critical pressure of the water to initiate a supercritical oxidation process.

27. (Original) The method of claim 26, further comprising containing exploding fragments of the container within the tube after opening the container.
28. (Original) The method of claim 26, wherein adding the water-oxidant mixture to the chamber comprises adding a base to the water-oxidant mixture.